

IN THE CLAIMS

1. (original) A Simian Immunodeficiency Virus (SIV) genome having a mutation within the packaging signal such that viral RNA is not packaged within an SIV capsid.
2. (original) An SIV genome according to claim 1 wherein the genome has a deletion in the region between the primer binding site and the 5' major splice donor site.
3. (previously presented) An SIV genome according to claim 1 wherein the genome comprises a mutation in the region between the 5' major splice donor size and the gag initiation codon.
4. (previously presented) An SIV genome according to claim 1 wherein the genome has a mutation within the DIS structure.
5. (currently amended) An SIV genome according to claim 1 wherein the mutation comprises deletion of
 - (a) a sequence of SEQ ID [[no 1]] NO:1, or
 - (b) a fragment thereof of 5 or more nucleotides in length, or
 - (c) a variant of either thereof.
6. (currently amended) A SIV genome according to claim 5 wherein the deletion comprises nucleotides 53-85 of SEQ ID [[No 1]] NO:1.
7. (original) A viral vector comprising an SIV packaging signal and a heterologous gene capable of being expressed in the vector.

8. (original) A vector according to claim 7 comprising the region between the primer binding site and the 5' major splice donor site, and/or the region between the 5' major splice donor site and the gag initiation codon or a fragment of either thereof.

9. (currently amended) A vector according to claim 8 comprising:

- (a) a sequence of SEQ ID [[no 1]] NO:1, or
- (b) a fragment thereof of 10 or more nucleotides in length, or
- (c) a variant of either thereof.

10. (previously presented) A vector according to claim 7 wherein the heterologous gene encodes a therapeutic protein or peptide, an antigen protein or peptide.

Claim 11 (canceled)

12. (previously presented) A virus produced by the method of claim 20.

13. (original) A pharmaceutical composition comprising a virus according to claim 12 and a pharmaceutically acceptable carrier.

14. (original) An SIV packaging sequence or an antisense sequence thereto, for use in the treatment or prophylaxis of SIV or HIV infection.

15. (original) An SIV packaging sequence according to claim 14 comprising a sequence of 5 or more polynucleotides from a region of the SIV genome between the primer binding site and the major 5' splice donor.

16. (currently amended) An SIV packaging sequence according to claim 14 comprising:

- (a) a sequence of SEQ ID [[no 1]] NO:1, or
- (b) a fragment thereof of 5 or more nucleotides in length, or

(c) a variant of either thereof.

17. (previously presented) A method of delivering a therapeutic or antigenic protein or peptide to an individual comprising administering to the individual an effective amount of a virus according to claim 12.

18. (previously presented) A method of treatment or prophylaxis of SIV or HIV infection comprising administering to an individual an effective amount of a SIV packaging sequence according to claim 14.

Claim 19 (canceled)

20. (previously presented) A process for producing a SIV virus encoding an heterologous gene, which process comprises infecting a host cell with a packaging defective SIV genome having a mutation in the packaging signal such that the viral RNA is not packaged within an SIV capsid and a viral vector comprising an SIV packaging signal and a heterologous gene capable of being expressed in the vector.

21. (previously presented) A method according to claim 17, wherein the virus is formulated as a pharmaceutical composition with a pharmaceutically acceptable carrier.

22. (previously presented) A method according to claim 18, wherein the packaging sequence comprises a sequence of 5 or more polynucleotides from a region of the SIV genome between the primer binding site and the major 5' splice donor.

23. (currently amended) A method according to claim 18, wherein the packaging sequence comprises:

(a) a sequence of SEQ ID [[no 1]] NO:1, or

(b) a fragment thereof of 5 or more nucleotides in length, or

LEVER et al. – Appln. No. 10/009,171

(c) a variant of either thereof.